

REMARKS/ARGUMENTS

Bearing in mind the comments of the Official Action, the application has been amended so as to place it in condition for allowance. An early indication of the same would be appreciated.

Claims 1 and 2 remain pending in this application. Claim 1 is independent. Claims 1 and 2 have been amended for clarity, and specifically not to overcome any art of record. No claims have been added or canceled by this amendment.

Withdrawal of the objection to the Specification is requested. Responsive to the Examiner's comments, a Substitute Specification incorporating headings, paragraph markings, and correction of a minor misspelling, is enclosed herewith. The undersigned certifies that no new matter is involved by the Substitute Specification. Entry of the Substitute Specification is requested.

Withdrawal of the objection to claims 1 and 2 is requested. Responsive to the Examiner's comments, claims 1 and 2 have been amended in a manner which is believed to overcome the Examiner's stated bases for objection.

Withdrawal of the rejection of claims 1 and 2 under 35 U.S.C. §102(e) as being anticipated by Chaudhry (US 6,282,075) is requested.

Applicant notes that anticipation requires the disclosure, in a prior art reference, of each and every limitation as set forth in the claims.¹ There must be no difference between the claimed invention and reference disclosure for an anticipation rejection under 35 U.S.C. §102.² To properly anticipate a claim, the reference must teach every element of the claim.³ "A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference".⁴ "The identical invention must be shown in

¹ *Titanium Metals Corp. v. Banner*, 227 USPQ 773 (Fed. Cir. 1985).

² *Scripps Clinic and Research Foundation v. Genentech, Inc.*, 18 USPQ2d 1001 (Fed. Cir. 1991).

³ See MPEP § 2131.

⁴ *Verdegaal Bros. v. Union Oil Co. of Calif.*, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987).

as complete detail as is contained in the ...claim.”⁵ In determining anticipation, no claim limitation may be ignored.⁶

By way of background, the present application, in a preferred embodiment, is directed to an overvoltage-safety device which can operate in a wide range of voltages, for example between 180 and 330 V, in order to be able to fulfill its role in practically all the countries of the world.

Applicant’s disclosed and claimed invention is directed to an overvoltage-protection device, applicable in particular to the low-voltage mains, which includes a gas-discharge arrester between the two lines of the mains, a varistor and a thermal-fuse element tasked with ensuring the thermal disconnection of the device. A function of extinguishing the gas-discharge arrester is dissociated from the thermal-disconnection function.

Preferably, in parallel with the varistor, is a resistor causing, after the short-circuiting of the gas-discharge arrester, the heating of the thermal-fuse element so as to trigger the thermal disconnection of the device. While the overvoltage-protection device is applicable to the low-voltage mains in a wide range of voltages, the varistor is defined so as to extinguish the gas-discharge arrester up to the maximum voltage of use, and the resistor is defined so as to trigger the thermal disconnection of the device at the minimum voltage of use.

In contrast, Chaudhry discloses, in the embodiment of Fig. 2, a MOV 44 and a resistor 42, which are respectively connected to two separate electrodes of a gas discharge tube 46. The electric potential at both electrodes of gas discharge tube 46 is not the same because both electrodes are not short-circuited. As a consequence, resistor 42 is not in parallel with MOV 44. The main object taught by Chaudhry is to provide a surge suppressor which includes a receptacle for a three prong AC power plug and which is adapted to be connected to AC outlets, which only accept two prong AC plugs (col.1, lines 53-65).

Chaudhry mentions that a single three electrode gas discharge tube, such as gas discharge tube 46, is equivalent to two, two-electrode discharge tubes, such as tubes 114 and 116 (col.4,

⁵ *Richardson v. Suzuki Motor Co.*, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989).

⁶ *Pac-Tex, Inc. v. Amerace Corp.*, 14 USPQ2d 187 (Fed. Cir. 1990).

lines 59-62). Considering this disclosure, the person skilled in the art may replace gas discharge tube 46 with two, two-electrode discharge tubes connected in the manner of tubes 114 and 116.

However, such a modification of the circuit of Fig. 2 results in MOV 44 and resistor 42 being connected to two separate two electrode discharge tubes. In addition, resistor 42 is not in parallel with MOV 44 in such a modified circuit. Still further, in the embodiment of Fig. 3, surge suppressor 100 comprises MOV 44 and resistor 42, which are connected in parallel. However, no fuse is provided in that embodiment.

Hence, Chaudhry does not disclose a combination including a varistor, a gas-discharge arrestor and a thermal fuse element mounted in series, and a resistor connected in parallel with the varistor.

As for the function performed by the claimed invention with respect to that performed by Chaudhry, according to pending claim 1, the resistor is sized so as to cause the heating of the thermal fuse element after the short-circuiting of the gas-discharge arrestor at the end of life of the gas-discharge arrestor. This means that the size of the resistor is low enough to permit a current sufficient to trigger the thermal disconnection of the thermal fuse element when the gas-discharge arrestor is permanently short-circuited. Chaudhry does not disclose any such functional limitation.

According to Chaudhry, resistor 42 serves to help initiate the arc in the gas tube, thereby reducing the transient produced when the gas tube goes into conduction (col.3, lines 38-42 and col.4, lines 23-25). Therefore, resistor 42 is selected in a different manner in order to fulfill an entirely different function from the above-mentioned function.

This functional difference is confirmed when one compares the size of resistor 7 according to the non limitative preferred embodiment according to the present specification (a few hundred ohms p.3, lines 30) with the size of resistor 42 according to Chaudhry (on the order of 30K ohms, col.3, lines 31-32).

With respect to defining and claiming the function of the recited invention, Applicant notes that functional claiming in apparatus claims is common practice and serves to define patentable subject matter. For example, in performing analysis under the doctrine of equivalents for purposes of determining infringement, “[t]o determine whether a claim limitation is met literally, where expressed as a means for performing a stated function, the court must compare the accused structure with the disclosed structure, and must find equivalent structure as well as identity of claimed function for that structure.”⁷ Thus, a claimed function can distinguish over prior art.

Further, “functional” language in claims is not expressly condemned by the patent statutes. On the contrary, the only portion of Title 35 U.S.C. that makes any reference to the use of statements of function specifically authorizes such use. All elements of a combination can be claimed in terms of what they do as well as in terms of what they are.⁸

Therefore, Applicant submits that claim 1 is novel with respect to Chaudhry due to both the novel recited structure, and the claimed novel functional aspects brought about by the recited structure.

In particular, the applied art does not disclose an over-voltage protection device suitable for protecting a mains which includes, among other features, “...a varistor and a thermal-fuse element arranged to ensure a thermal disconnection of the over-voltage protection device from the mains, said gas-discharge arrestor, said varistor, and said thermal-fuse element being mounted in series with each between two lines of the mains, wherein the over-voltage protection device includes, in parallel with the varistor, a resistor sized so as to cause, after a short-circuiting of the gas-discharge arrestor, a heating of the thermal-fuse element which triggers the thermal disconnection of the over-voltage protection device from the mains”, as recited in independent claim 1, as amended.

Accordingly, as the applied art does not disclose, either explicitly or inherently, all the recited features, withdrawal of the anticipation rejection and allowance of independent claim 1 are requested. As dependent claim 2 depends from claim 1, Applicant submits that it is allowable at

⁷ *Pennwalt Corp. v. Durand-Wayland, Inc.*, 833 F.2d 931 (Fed. Cir. 1987).

least on that basis, without recourse to the additional patentable features recited therein.

Allowance of claim 2 is also requested.

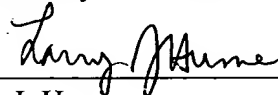
In view of the above, each of the presently pending claims 1-2 in this application is believed to be in immediate condition for allowance. Accordingly, the Examiner is respectfully requested to withdraw the outstanding rejection of the claims and to pass this application to issue.

Attached hereto is a Substitute Specification, and a marked-up version of the changes made to the specification and claims by the current amendment.

In the event that the Examiner believes an interview would be helpful in resolving any outstanding issues in this case, the undersigned attorney is available at the telephone number indicated below.

Although extensions of time are not believed to be necessary with this communication, the Director is hereby authorized to charge any fees, or credit any overpayment, associated with this communication, including any extension fees, to CBLH Deposit Account No. 22-0185.

Respectfully submitted,

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Encl: Claims after Amendment
Substitute Specification
Marked-up Version of Specification

⁸ *In re Fuetterer*, 319 F.2d 259, 138 U.S.P.Q. 217, 222 (C.C.P.A. 1963).